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CLEAN WATER ACT BASE 106 GRANT APPLICATION

WATER POLLUTION CONTROL PROGRAM

FY2015-FY2016 FEDERAL FUNDING

CLEAN WATER BRANCH

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WATER POLLUTION CONTROL PROGRAM
FY2015-FY2016 FEDERAL FUNDING

EXECUTIVE SUMMARY

Goals, Program Objectives, Sub-objectives, and Targets: The program goals for **federal environmental protection Goal 2 (Clean and Safe Water)** and related State Department of Health (DOH) are listed below.

Environmental Health Administration (EHA) Existing Goals, Indicators, Measures of Effectiveness (MOE)

1. State Water Goal:

- **To ensure that Hawaii's coastal waters are safe and healthy for people, plants and animals**
- **To protect and restore the quality of Hawaii's streams, wetlands, estuaries and other inland waters for fish and wildlife, recreation, aesthetic enjoyment and other beneficial uses**

Environmental Indicators:

- **Shoreline postings due to sewage or other water pollution**
- **Percentage of wastewater recycled annually**
- **Wastewater treatment plant operations and maintenance compliance record**
- **Beach closure/warning days annually due to sewage or water pollution**
- **Number of impaired streams listed**

Measures of Effectiveness:

- **Percent of wastewater dischargers in compliance with permits, healthy for people and the environment**
- **Percent of marine recreational sites in compliance with rules**

Environmental Protection Agency (EPA) Existing Goals and Objectives

2. EPA GOALS: EPA Goals from: 2006-2011 Strategic Plan

GOAL 2: Clean and Safe Water

GOAL 4: Healthy Communities and Ecosystems

GOAL 5: Compliance and Environmental Stewardship

EPA GOAL 2 Objectives:

- 2.1. **Protect Human Health**: Protect human health by reducing exposure to contaminants in drinking water, in fish and shellfish, and in recreational waters.
 - Water safe for swimming.
- 2.2. **Protect Water Quality**: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
 - Improve water quality on a watershed basis.
 - Improve coastal and ocean waters.
- 2.3. **Enhance Science and Research**: Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.
 - Apply best available science.
- 4.3. **Ecosystems**
 - Protect and restore ecosystems.
 - Increase wetlands.

4.4. **Enhance Science and Research**

- Apply the best available science.

5.1. **Improve Compliance**

- Compliance assistance.
- Compliance incentives.
- Monitoring and enforcement.

5.2. **Improve Environmental Performance through Pollution Prevention and Innovation**

- Prevent pollution and promote environmental stewardship by government and the public.
- Prevent pollution and promote environmental stewardship by business.
- Business and community innovation.
- Environmental policy innovation.

Federal EPA Goal from: 2006-2011 EPA Strategic Plan
Environmental Indicators from: 2010 HIOH-EHA Indicators of Environmental Health
Performance Assessment Measures from: FY 2010 EPA National Water Program Guidance

HUMAN RESOURCES
Personnel Assignment

Name	Position	Permitting Months	Compliance Months	Monitoring Months
Administration:				
Wong, Alec*	Br. Chief	3S	3S	3S
Ledda, Madeleen (Maddie)*	Secretary II	3S	3S	3S
Shintani, Stacy	ITS IV	3S	3S	3S
Teruya, Terry	EHS IV QA/QC	3S	3S	3S
Engineering:				
Pascua, Noralin (Nora)***	Office Assistant III	6F		6F
Lum, Darryl	Engr. Sup VI	12S		
Takamoto, Clayton (Scott)***	Engr. V	12F		
Chen, Edward (Ed)	Engr. V	12S(401WQC)		
Sumida, Shane	Engr. V	12S		
Poentis, Kris	Engr. V	12S		
Migita, Reef***	Engr. V	12F		
Rossio, Marianne***	Engr. V	12F		
Fouse, Jiaping***	Engr. III	12F		
Vacant***	Engr. IV	12S		
Haae, Glenn	Engr. III	12F		
Maruoka, Colin	Engr. III	12S		
Compliance:				
Goo, Taryn***	Office Assistant III		12F	
Vacant	Sup-EHS V		12S	
Miyashiro, Scott***	EHS IV		12F	
Weaver, Stefanie	Engr. III		12S	
Tanimoto, Jamie***	EHS IV		12F	
Kurano, Mathew (Matt)***	EHS IV		12F	
Nagaue, Gavin***	EHS III		12F	
Monitoring:				
Okubo, Watson	Sup-EHS V			12S
Murakawa, Scott*	EHS IV			9S
Asakura, Roland*	EHS IV			9S
Mukai, Neil *	EHS IV			9S

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Ueunten, Gary*	EHS IV			9S
Mikami, Clinton (Dale)**	EHS IV			12F
Vacant**	EHS IV			12F
Tubal, Randee***	TMDL Coord.			12F
Vacant***	EHS IV			12F
Vacant***	EHS IV			12F

Environmental Planning Office				
McIntyre, Laura***	Planner VI	1F		
Hijirida, Linda***	Secretary II	1F		
Ishida, Caroline***	PPC	1F		
Environmental Resources Office:				
Sasaki, Pat***	PHAO IV	1F		
Yamaguchi, Gordon***	Acct. III	1F		
Jacobson, Steven***	Hearings Officer	1F		
Environmental Management Division				
Honda, Myron***	QA EHS IV	1.2F		
Magata, Kathi, "KC"***	DPSA IV	1F		
Vacant***	Office Assistant III	1.2F		

* 75% Base 106 and 25% NPS grant. ** 100% BEACH grant ***100% Base 106

NARRATIVE

Overview:

For FY 2015-2016, the CWA Section 106 grant Water Pollution work plan focuses on permitting, enforcement and water quality monitoring.

Permitting:

FY2015

The priority for the Permitting Program will be to issue major and minor permits in accordance with the NPDES Permit Issuance Schedule (Attachment 2); issue NPDES permits, NGPCs, and Section 401 WQCs for new facilities/projects/discharges; and continue the development and implementation of methods to streamline the NPDES Permit and Section 401 WQC issuance processes. The Permitting Program will also be revising the NPDES General Permits expiring in 2016 that authorize discharges of once through cooling water less than one (1) million gallons per day; hydrotesting waters; construction activity dewatering effluent; and storm water and certain non-storm water from Small Municipal Separate Storm Sewer Systems (MS4s). Finally, the Permitting Program will continue working with Windsor Solutions to: 1) Integrate the e-Permitting NPDES applications to DOH's database system, Water Pollution Control (WPC); 2) Include the WQC0833 DOH Notification Form for the EPA 2013 Vessel General Permit into WPC; 3) Create WPC global limit sets to assist the Permitting Program in entering NPDES permit limits into WPC which then flows to ICIS-NPDES; 4) Reconcile facility data in the Environmental Health Warehouse; and 5) Create WPC document templates for NPDES permits, NGPCs, and Section 401 WQCs.

Enforcement and Compliance:

FY2015

The priority for the Enforcement and Compliance Section will have 50% of major facilities, 20% of minor facilities, 10% of NGPC facilities (industrial stormwater and Phase I construction stormwater); and 5% of Phase II construction stormwater are to be inspected and addressed through enforcement actions or compliance assistance consistent with agreed upon DOH-EPA Inspection Schedule. [REDACTED]

up on inspections and audits conducted in FY14. Further, the State will coordinate joint DOH-EPA working groups for subjects identified in the DOH-EPA January 2014 meetings, whole effluent toxicity reduction evaluation training, for permittees and accompany EPA on whole effluent toxicity laboratory audits. The State will continue to follow-up on all active consent decrees which include: County of Maui, Hawaii Department of Transportation-Airports, Highways and Harbors, and City and County of Honolulu (CCH) global sewer consent decrees (CD) which include reviewing and commenting on CD submittals and follow-up inspections, Hawaii American Water administrative orders, Marisco CD, Waimanalo Gulch Sanitary Landfill EPA Administrative Order [REDACTED]

[REDACTED] The Enforcement and Compliance Section will continue [REDACTED]

[REDACTED] Yacht Harbor Towers is the most recent permittee to start using NetDMR production. Hawaii American Water Company has completed implementing a new SCADA system and has been submitting successful batch DMR data to NetDMR test. Hawaii American Water Company is ready to start submitting their DMR data to NetDMR production soon. The Enforcement and Compliance Section will be working with Windsor Solutions on several projects: 1) the data flow from the Water Pollution Control (WPC) to ICIS is currently active. The DOH is flowing permit, enforcement and spill data to ICIS. The Enforcement and Compliance Section is currently conducting quality assurance on the data that is flowing to ICIS; 2) working with other Branches within the Environmental Health Administration to reconcile facility data on the Environmental Health Warehouse, which was released to the public at the beginning of March 2013, using a new reconciliation tool that was released by Windsor in February 2014; 3) helping develop a public inquiry application which will help reduce the amount of Requests for Government Records that the CWB receives; 4) working with Windsor to develop the mobile field application (nSpect) for inspections conducted at construction and industrial stormwater general sites. The mobile field application will be integrated with WPC; and 5) Working on getting new and reissued permits coded into ICIS for NetDMR use.

Water Quality Monitoring and Assessment:

FY2015

CWB will continue collaborating with other agencies, organizations, and individuals: Great Lakes Beach Association (Beachnet), United States Geological Survey (USGS), University of Hawaii (UH), John A Burns School of Medicine (JABSOM), Pacific Research Center for Marine Biomedicine, Surfrider Foundation Hawaii Chapters, Beachnet, and Hanalei Watershed Hui. CWB will also keep close ties with specific individuals such as: Dr. Alexandria Boehm, Stanford University; Dr. Yuanan Lu, UH Office of Public Health Studies; Dr. Tao Yan, UH School of Civil and Environmental Engineering; Dr. Stephen Siefried, JABSOM; Dr. Marek Kirs, UH Water Resources Research Center (WRRC) to keep updated on the latest research in surface water monitoring, Dr. Celia Smith, UH Botany Department marine algae issues, and Carl Berg, Kauai Chapter of Surfrider Foundation.

In preparation for the 2015 National Reef Assessment, we invited Dr. Celia Smith, UH Botany Department to do a presentation of Hawaiian reef algae on Feb 19, 2014. Dr. Smith talked about the types of algae, high and low nutrient types, types vulnerable to overgrazing and more important the interplay among the grazers and browsers on the reef. Planned are identification classes and development of a phycology library of limu pressings.

Total Maximum Daily Load (TMDL):

CWB Monitoring and PRC staff have been meeting with DLNR (DAR and Commission on Water Resource Management) on our collective watershed issues and working toward a defensible watershed delineation to satisfy all concerned including EPA. We will pursue ArcGIS training at the introductory level, ArcGIS 1 and second level ArcGIS 2 for select staff.

FY2015

Continue ArcGIS training with ArcGIS 3, performing analysis portion

Waikale: Continue working with City and County of Honolulu (CCH) on Waikale. CCH is recalibrating their data to fit into HSPF model. CWB to follow up with the CCH. Use results from USGS sediment study and other available information to guide next steps for TMDL development.

Water Quality Standards

FY2015

HAR 11-54 will be amended to: 1) Clarify the Class 1 and AA water bodies; 2. Revise the recreational criteria to be consistent with EPA's 2012 Recreational Water Quality Criteria recommendations for protecting human health in all coastal and non-coastal waters; 3) Include language to enforce HAR 11-54; 4) Clarify that NPDES permits can include schedules of compliance for water quality-based effluent limitations in HAR 11-54; and 5) Include provisions to allow intake credits for water quality-based effluent limitations in NPDES permits.

In addition to Enterococci in the 2012 Recreational Criteria, include Clostridium perfringens into HAR 11-55. Frequency of sampling should be every 5th day in a 30 day period. Enterococci should not exceed a geomean of 35 cfu/100ml , while Clostridium perfringens should not exceed a geomean of 50 cfu/100ml. Supporting documents being gathered.

303(d)/305(b) Integrated Report

FY2015

For FY 2015, CWB will put out an open call for data by April 1, 2015 for the 2016 Integrated Report. Data acceptance will be closed November 30, 2015.

II PROGRAM WORK PLANS

A. Federal Grant Administration - CWA 106 (Surface Water)					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
<i>Federal Grant Administration</i>	<i>Timely award of federal grants</i>	<i>1) Draft work plan, consistent with proposed outcome format</i>	<i>April 2014</i>	CWB-A. Wong	
		<i>2) Grant negotiations</i>	<i>May 2014</i>		
		<i>3) Approved final grant application, work plan to EPA</i>	<i>June 2014</i>		
		<i>4) EPA award of grant</i>	<i>w/in 30 days of fund availability</i>		
	<i>Timely submittal of reports on workplan accomplishment and program outcomes</i> <u>Outcome:</u> Reports will be used to document satisfactory progress and issues needing further attention and funding in the next year work plan.	<i>1) Quarterly and annual reports on all program outcomes and work plan activities (per specific program requirements)</i>	<i>Dec., March, June, September 2014, 2015</i>	All ERO/EMD (Manager/Sec)	FY15 Fiscal Sheet Page 1 of 18
		<i>2) Interim/Final FSRs within 90 day grant expiration.</i>	<i>Nov. 2015</i>	ERO	
		<i>3) Specific Program Reporting to be added for each program.</i>	<i>Annually, Dec. 31</i>	CWB staff	
		<i>4) Financial Terms and Conditions Reports, as appropriate.</i>	<i>Annually, Dec. 31</i>	ERO	

B. NPDES Permits - Funded under CWA 106				
Goal 2: Safe and Clean Water - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.				
Objective 2.2: Protect Water Quality - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.				
Subobjective 2.2.1 Protect and Improve Water Quality on a Watershed Basis - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)				
State Program Indicators (To be added by State)				
HI PROGRAM OBJECTIVE NO. 1 Control point source discharges through the issuance of appropriate NPDES permits to maintain the beneficial uses of the State receiving waters. HI PROGRAM OBJECTIVE NO. 2 Certify that Section 404 permitted activities will not adversely impact the beneficial uses of the State receiving waters.				
EPA/State Core Performance Measures	CWB Strategic Plan - Program Performance Objectives/Measures	Target	Due Date	Result, Date Done, Comments
Permitting Program Outcome/Output Measures	A. NPDES permit program:		Quarterly	
	1. Report # of individual NPDES permits issued.	A.1. See Attachment 2		
	2. Report # of Notices of General Permit Coverage (NGPCs) issued.	A.2. Varies with number of applicants		
Permitting Program Outcome/Output Measures	B. COE 404 permitted activities do not impair designated uses. 1. Report # of 401 WQCs certifications issued, waived, or denied.	B.1. Varies with number of applicants	Quarterly	

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Permitting	<p>Control point source discharges through the issuance of appropriate NPDES permits in order to maintain the beneficial uses of State receiving waters</p> <p>Outcome: 90% or more of Hawaii's NPDES permits will be current</p> <p>EPA contractor assistance</p>	<p>FY15</p> <p>Issue two (2) new minor individual permits, and re-issue seven (7) minor individual permits according to the Permit Issuance Schedule. (See Attachment 2.)</p>	9/30/2015	CWB-Engineering Section	<p>FY15 Fiscal Sheet page 1</p> <p>\$99,186 in FY15 in-kind service request for permit development assistance from contractor.</p>
		<p>In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to assist with NPDES permit development. It is more time-efficient for EPA rather than the State, to procure these contractual services. (\$99,186 in FY15).</p>	FY15-9/30/2015		
		<p>EPA will provide for Hawaii DOH review and comment on all in-kind contract support work orders to ensure the proposed tasks, milestones, and schedules provide a reasonably standardized approach to permit preparation and meet Hawaii DOH support needs. To the extent in-kind contract service work orders contain specific workplans and schedules concerning specific permit development tasks, Hawaii DOH staff will provide necessary permit related information and materials to contractors, and review and comment on contractor interim deliverables, in accordance with the schedules set forth in the contract work orders.</p>			

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		If it is infeasible to meet the schedules established in the work orders, Hawaii DOH will notify EPA and the contractor immediately of any delays and its revised schedule for providing the necessary materials or review. EPA reserves the right to direct the contractor to complete permit development work products without benefit of reviews of interim deliverables if the State does not meet schedules for providing those reviews.			
		Any permit still under development at end of previous fiscal year will be issued or reissued.			
	To issue and update individual and general NPDES permits	See Attachment 2 for FY 2015-16 Update 5 year plan in Attachment 2 annually Maintain and update inventory of industrial activities Develop and maintain a data base of industrial facilities claiming conditional "no exposure" exclusion from obtaining a storm water permit.	9/30/2015		
	Public Notification	Provide public notification of construction storm water Notices of Intent for projects greater than 20 acres on the island of Hawaii in the Clean Water Branch's WEB site at https://health.hawaii.gov/cwb/			
	Wastewater Sludge	The State will add the agreed-upon sludge "boilerplate" monitoring/reporting language to all reissued NPDES permits and will also add, when requested and provided by EPA, specific language on a case-by-case basis.	As required		
	Public Notification	In addition to issuing Notices of Proposed Permit Issuance for individual permits and individual 401 Water Quality Certifications in the newspapers of the County where the discharge is located, the State will provide public notification in the Clean Water Branch's WEB site at: https://health.hawaii.gov/cwb/			

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
	CAFO inventory	The State will update its AFO/CAFO inventory and permit CAFOs that are identified as having discharges to State waters. In addition, all permitted CAFOs will be required to have nutrient management plans and other applicable management measures as required in the effluent guidelines.	As required		
	Sec. 401 Water Quality Certification	The State will continue to implement a State Section 401 Water Quality Certification Program for applicants required to have a federal permit or license to construct in waters of the State.	As required		
	<p>Continue development and implementation of HI-NPDES Water Pollution Control (WPC) Database which is compatible with EPA ICIS-NPDES system.</p> <p>The HI-NPDES WPC database provides the mechanism for effective management of the NPDES program. It supports all business areas of the NPDES program, including the following:</p> <ul style="list-style-type: none"> ■ Permitting (Tracking and Issuance) ■ Compliance Monitoring ■ Program Management (Compliance Determination) ■ Enforcement (Administrative, Criminal, and Judicial) 	HI-NPDES WPC Database maintenance and improvement.	October 2014 to September 2015	CWB	Federal FY15 - \$30,000

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
	<p>The HI-NPDES WPC database allows electronically submission of NPDES application, DMR and potential automatic electronic transmittal of data to EPA ICIS-NPDES system.</p> <p>The HI-NPDES database provides better QA/QC of data input and tracking.</p>				
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revision to the QAPP if any, follow the Quality Management Plan (QMP).	Ongoing as required	CWB	

C. Monitoring - Funded under CWA 106					
Goal 2: Safe and Clean Water - Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.					
Objective 2.2: Protect Water Quality - Protect the quality of rivers, lakes and streams on a watershed basis and protect coastal and ocean waters.					
Subobjective 2.2.1: Protect and Improve Water Quality on a Watershed Basis - Number of the Nation's watersheds where: water quality standards are met in at least 80% of the assessed water segments; and all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002. (2,262 watersheds nationwide)					
PROGRAM OBJECTIVE NO. 3 Enhance the ambient Water Quality Monitoring Program to identify impaired bodies and restore their beneficial uses.					
Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Emergency Response, Public Safety, and Surveillance Monitoring	Protect the people of Hawaii and the environment through an appropriate WQ monitoring and warning system. Public health and safety will be served and the environment will be protected.	1. Responses to treatment plant spills and bypasses and various other kinds of accidental or emergency discharge of pollutants to surface waters.	Ongoing	CWB Monitoring Section and Enforcement & Compliance Section State Laboratories-Environment Branch	Fiscal Sheet Page 1 of 18
		2. Respond to polluted runoff events.			
		3. Complaints Response and Enforcement: respond daily to citizens' complaints of water quality problems in surface waters.			
		4. 401 WQC Compliance Inspections: attend pre-construction meetings; conduct compliance inspections; respond to citizens' complaints on construction projects.			

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Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Core Monitoring of Surface Waters	Monitor core set of long term stations identified by the 1999 edition of the surface water Quality Management Plan (QMP) and water quality assays of Hawaiian coastal waters. (See Comprehensive Monitoring Strategy for the State of Hawaii) Sustained collection of historic water quality data in key locations.	Monitor core stations and major embayments on each island for the following parameters: Ammonia, Nitrate, Total N, Total P, Chlorophyll a, Silica, TSS Core stations are: Oahu: Kaneohe, Pokai Maui - Kahului Hawaii – Hilo Kauai - Nawiliwili and Port Allen Major embayments are: Kaneohe, Hilo, Nawiliwili, Port Allen, Kahului, and Pokai. Monitoring data collected at long-term monitoring stations will be entered into STORET/WQX monthly.	On hold due to reduction in force	CWB-Monitoring Section State Lab - Chem and Micro.	
Data Analysis and Reporting	Utilize modern technology to further the integration and availability of environmental data to all customers of DOH data. All customers of DOH data will have easy access to information.	1. DOH will submit Draft FY2016 Integrated 303(d)/305(b) Report. - Public review of draft report - Close comment period - Submit final 2016 IR to EPA for approval	February 15, 2016 March 15, 2016 April 15, 2016 June 30, 2016	CWB	Federal: 3- persons State: 4-persons
		2. STORET data management input/output of data on all watershed projects, TMDLs, Integrated Report, etc.	Quarterly	CWB	

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Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		3. NHD stewardship will edit high-resolution NHD data for Hawaii, which is available via USGS website.	Completed	Monitoring Section and RCUH hire	FY15 -\$60,000
		NHD & GNIS Maintenance – Update feature names & coordinates	Ongoing		
		Geo-referencing of State water quality assessment and impairment decisions	Completed		
		Finalize assessment unit designations for State water quality reporting	Completed		
		4a. Input 2014 Integrated Report entry in ADB.	12/31/2014	Monitoring Section and RCUH hire	
Data Quality	1) Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the CWB QAPP follow the Quality Management Plan (QMP).	Ongoing as required	CWB	
		Respond to any comments resulting from EPA QA Office of draft CWB QAPP (submitted 5/7/12).	60 days after review completed	CWB	
		Final CWB QAPP to EPA	90 days after review completed	CWB	

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Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inland Waters	Collect and assess data on inland waters to determine water quality.	National Lakes Assessment	Completed	CWB Monitoring Section	MI funds
		National Rivers and Stream Assessment	FY2015-16	CWB Monitoring Section	MI funds
		Attend NR&S Assessment training at Folsom, California	April 8-9, 2014	CWB Monitoring Section	604 funds
		Develop draft QAPP for inland waters include supporting SOPs	9/2/2014	CWB Monitoring Section	
		Submit final QAPP for inland waters and supporting SOPs	60 days after receiving EPA QA Office review of draft 11/3/2014	CWB Monitoring Section	

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Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Watershed Assessments	<p>Collect and assess data on a watershed basis in an effort to determine sources of watershed pollution and develop means to improve water quality.</p> <p>Improved water quality by watersheds.</p> <p>Develop a watershed decision matrix</p> <p>Develop decision units and standardized assessment methodology for use in various branch applications</p>	<p>Analyze existing and readily available surface water data and related information (e.g. complaints, spills, inspections), waterbody assessment priorities and listing criteria, and DOH program capabilities to prepare recommendations for:</p> <p>a. Water quality sampling by the CWB Monitoring and Assessment Section;</p> <p>b. Bed sediment and fish tissue sampling and fish risk assessments conducted by HEER, and CWB;</p> <p>c. Assessments of stream habitat quality and biological integrity.</p> <p>d. Water quality sampling (surface and ground) and SWAP enhancement to address Clean Water Act and Safe Drinking Water Act integration measures.</p> <p>e. Achieving other assessment goals and objectives through volunteer monitoring, grantee monitoring (e.g. 319 projects), compliance monitoring (e.g. 401, NPDES, and SEP conditions), and third-party independent monitoring (e.g. academic and scientific research)</p> <p>f. Standardize assessment methodology using decision units agreeable to DLNR and DOH</p>	Ongoing	<p>CWB Monitoring Section</p> <p>State Lab.- Chem and Micro.</p>	Federal: 3 persons

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Community Involvement	Utilize community and regulated community input in developing environmental goals, objectives, statutes and rules to ensure that the public is educated, aware, and in synch with the environmental management programs.	Conduct public outreach and education activities to promote waterbody monitoring and assessment, data quality, and comparability of data with State water quality standards, and assist other DOH programs, government agencies, scientists, schools, community groups, and individuals with surface water data collection, analysis, and interpretation	Ongoing	CWB	
		Work with already existing organizations that affect policy (neighborhood boards, community association) to ensure public input. Promote Leadership in Energy and Environmental Design (LEED) programs and community-based social marketing.		CWB	

Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
TMDL Development and Approval TMDLs under development: Pearl Harbor Streams: Waialeale Streams Prioritize watersheds for TMDL development	Completion of TMDLs to provide scientific basis for load Allocation (LA) and Waste Load Allocation (WLA) that must be implemented to achieve WQS. All data collected for TMDL development will be entered into STORET or another appropriate electronic format.	1. Develop watershed prioritization decision matrix to maximize TMDL effectiveness and implementation. 1a Apply watershed prioritization decision matrix results to prioritize TMDL efforts.	10/14/14-09/13/15 Ongoing	CWB	FY15-\$30,000
		2. Pearl Harbor Waialeale Stream Continue to gather existing information generated by stakeholders and DOH (model results, reports, etc.). Continue discussions with CCH on how to move forward with either TMDL development or implementation activities. Review CCH and USGS sedimentation study.	Ongoing	CWB	

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		3. HDOH contract for water quality assessment and general TMDL development	Ongoing	CWB	
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Program Objective	Program Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Water Quality Standards	-Review and amend water quality standards. Assure that monitoring under permit conditions are meaningful and of use to CWB for IR, TMDL, WQ Standards revision, etc.	Revise the recreational criteria to be consistent with EPA's 2012 Recreational Water Quality Criteria recommendations for protecting human health in all coastal and non-coastal waters. Include Clostridium perfringens to bacteria monitoring in HAR 11-55. Evaluate Hawaii Health Survey for possible update to numeric standards for toxic pollutants	FY15	CWB	
	-Develop the strategic plan for development of Biocriteria for inland waters.	Review USGS report: Development of Invertebrate Community Indexes of Stream Quality for the Islands of Maui and Oahu, Hawaii, EPA National Lakes Assessment and National Rivers and Streams Assessment Protocols.	Ongoing or as required	CWB	
	-Conduct internal, intergovernmental, and public education/outreach about the meaning and application of the WQS	Update WQ Standards Map to show all waterbodies and their classification and definitively identify all waterbodies (sanctuaries, refuges, reserves, critical habitats, etc.) to provide the Director of Health with the authority to determine which waterbodies will be added to more restrictive waterbody list (Class 1 inland and Class AA marine waters). Currently, it can be interpreted that all new sanctuaries, refuges, reserves critical habitats, etc., established by DLNR will automatically be included in restrictive waterbody classifications.	Ongoing or as required	CWB	

D. Compliance/Enforcement/Inspections - Funded under CWA 106					
Goal 5: Compliance and Enforcement Stewardship – Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship.					
Objective 5.1: Improve Compliance.					
Sub-objective 5.1.3 Monitoring and Enforcement.					
HI Program Objective No. 4 Ensure expeditious compliance with State Water Pollution rules.					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
General Compliance	Achieve compliance rate of 98% for NPDES facilities	Implement the State's Annual Inspection Plan. Track and evaluate NPDES reported self-monitoring. Take timely and appropriate enforcement action against violators	Ongoing.	CWB- Enforcement and Compliance Section, Attorney General's Office	Fiscal Sheet Page 1 of 18
Data Quality	Ensure that data gathered and used under the NPDES program is of sufficient quality to support program objectives	Revisions to the QAPP follow the Quality Management Plan (QMP). Enforcement DMR draft QAPP has been submitted to EPA on March 2012. CSI QAPP will be submitted when CSI starts	Ongoing, or as required	CWB	
ICIS-NPDES	To perform data input into ICIS-NPDES in accordance with the procedures outlined in the 1985 OCS Quality Assurance Guidance Manual, and the December 28, 2007 ICIS Addendum to Appendix C of the PCS Policy Statement defining the minimum ICIS-NPDES data elements comparable to PCS WENDB and other system-required ICIS-NPDES data elements.	(1) Enter timely and accurate for all enforcement orders issued by the DOH.	(1): Within 15 days of receipt.		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		(2) Enter NPDES inspection information for inspections conducted by the DOH.	(2): Within 30 days of the inspection.		
		(3) Enter effluent limits for individual majors/minors, monitoring and report requirements for NPDES permittees.	(3): Within 90 days of permit effective date.		
		(4) Generate and distribute "preprinted" Discharge Monitoring Reports (DMRs) for permittees.	(4): As necessary to keep permittees supplied.		
		(5) Enter timely and accurate NPDES DMR data as reported on the DMR forms by NPDES permittees.	(5): Within 15 days of receipt.		
		(6) Implement NetDMR with permittees.	(6): Ongoing, or as required		
		(7) Meet the new data requirements for ICIS-NPDES including non-major, CAFO and SSO data.	(7): Ongoing, or as required		
		(8) Generate the automated QNCR report.	(8): Within 45 days of the end of the calendar quarter.		
		(9) Regularly perform QA checks for DMR data completeness on ICIS and follow up on missing data as needed.	(9): Concurrent with the QNCR.		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		(10) Participate in EPA ICIS-NPDES workgroups.	(10): Ongoing, or as required.		
		(11) Participate in annual ICIS-NPDES meetings and trainings.	(11): Ongoing, or as required		
		(12) Enter into ICIS-NPDES applicable WENDB data for each formal or informal enforcement action taken against major and minor NPDES facilities, NGPC enrollees, and non-filers.	(12): within 30 days of issuance of enforcement action.		
		(13) Single Event Violation (SEV) data entry reporting, Informal enforcement action data entry reporting	(13); Ongoing, or as required		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Development of an Annual Inspection Plan to identify compliance problems. Region 9 may consider revising the measure of the State's inspection accomplishments if DOH demonstrates that extraordinary or unexpected circumstances prevent it from being able to carry out its workplan requirements. DOH will explain in detail such circumstances in writing. Such circumstances might include emergency response activities, work on major enforcement cases, or other reductions in staff available to carry out the required inspections.	<p>(1) Develop an inspection plan that is based on the state's environmental priorities and conforms with EPA's Compliance Monitoring Strategy (2/28/08). The plan shall provide that:</p> <p>A) For FY15, follow the agreed upon DOH Inspection Plan which targets 50% of the individual major permit enrollees; at least 20% of the traditional minor permit enrollees; at least 10% of the industrial storm water general permit and Phase I construction storm water enrollees; and 5% of Phase II construction storm water enrollees.</p> <p>B) A significant number (more than 50%) of the CEIs to be conducted on major and minor permits shall be unannounced;</p> <p>C) Follow-up inspections are not to be counted towards the State's totals; however, the inspections will be entered into ICIS-NPDES.</p> <p>Inspections of traditional minor facilities shall be timed to be completed approximately 12 months before the NPDES permits are issued/renewed.</p> <p>Inspections shall be prioritized in the priority watersheds. All inspections performed in a designated priority watershed shall be noted/tracked in ICIS-NPDES.</p> <p>The inspection plan shall be submitted as an MS Excel spreadsheet that identifies, for each universe of inspection required under the CMS, the number of proposed inspections.</p> <p>Incorporate pollution prevention/waste minimization activities into inspections.</p>	FY15 October 31, 2014		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
		<p>(3) NPDES inspections will include, but not be limited to, the following activities concerning compliance with permit limitations and conditions:</p> <p>a) Verification of record keeping and reporting as outlined in Section 3 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>b). A physical inspection of the facility, including unit processes and operations and receiving water observations, as outlined in section 4.B of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>c). An evaluation of operations and maintenance programs as outlined in section 4.C of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>d). An evaluation of facility compliance sampling activities, including: adequacy of sampling, methodology and locations; sample preservation, containers and hold times; flow measurement; and compositing techniques, as outlined in sections 5 and 6 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p> <p>e). An evaluation of laboratory procedures (or verification of current lab certification) and laboratory quality assurance procedures (if analyses are done on site), as outlined in Section 7 of the NPDES Compliance Inspection Manual (EPA 300-B-94-014).</p>	Ongoing or as required		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	Inspection Reports	(4) The inspection reports will discuss the findings related to all of the above activities and the field inspection notes will support all of the inspection report findings.			
		(a) Inspection reports shall be sent to EPA within 30 days of the inspection date, and shall be accompanied by a copy of the report transmittal letter to the permittee. Applicable WENDB data will be entered into ICIS-NPDES within the same time frame.	4(a) Ongoing, within 30 days of date of inspection, as requested		
		(b) DOH shall provide EPA with status reports of inspections, enforcement actions and/or other inspection/enforcement related items during monthly conference calls between EPA and DOH enforcement staff.	4(b) Monthly		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Inspections	EPA Contract Services	(5) In lieu of Section 106 surface water funds, Hawaii DOH requests in-kind assistance from EPA in the form of contractor services to conduct compliance inspections of select NDPES permits. It is more time-efficient for EPA rather than the State, to procure these contractual services. Time consuming joint enforcement actions prevent DOH from conducting these inspections. (\$100,000 in FY15)—Inspections conducted by contractors to the State will count towards the State's totals.	Propose list of candidate inspections to EPA by 10/30/14 (FY15). Complete all inspections by 6/1/15 (FY15). All draft inspection reports to be submitted by the contractor to DOH by 6/30/15 (FY15). All final inspection reports shall be transmitted to the facility (with copies to EPA) no later than 9/30/15 (FY15).	CWB Enforcement Section	FY15-\$100,000 EPA in-kind assistance Refer to CWB Budget Details-Federal Funds (Budget Sheet page 13 of 18)

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Compliance Assurance	To achieve and maintain high levels of compliance in the NPDES program to be tracked through ICIS-NPDES	(1) Prepare Quarterly Non-Compliance Reports (QNCR) via ICIS-NPDES for major dischargers. (a) No permit will remain in non-compliance for the same violation on two consecutive QNCR without: being returned to compliance, or Having timely and appropriate formal enforcement action taken against them consistent with the DOH enforcement procedures manual and penalty policy.	(1) Within 45 days of the end of each quarter		
		(2) Prepare quarterly list of other minor discharges that are in SNC.	(2) Within 45 days of the end of each quarter		
		(3) Review Discharge Monitoring Reports (DMRs) for accuracy and violations. All DMRs will be reviewed within 30 days of receipt.	(3) On-going, as DMRs are received		
		(4) Identify and list all major and minor NPDES facilities/permits	(4) Dec. 30		
		(5) Assist EPA in reviewing deliverables from the Hawaii Department of Transportation, CCH, Marisco and Maui County consent decrees. Conduct appropriate follow-up activities as indicated by collection system evaluations conducted to date; Initiate appropriate responses to reported sewage spills	(5) As stipulated in the consent decrees		
		(6) Prepare and submit to Region 9 a response to EPA's quarterly Facility Watch List, as applicable and consistent with program guidance and SOP's	(6) Within 30 days of issuance of the Watch List to the State		

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Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Enforcement	1) To provide for the issuance of timely and appropriate enforcement orders and penalties required to achieve and maintain compliance consistent with DOH enforcement procedures and penalty policy. (2) To ensure compliance with all NPDES permits and active consent agreements and decrees.	1) Take timely and appropriate enforcement actions on all applicable violations according to the Enforcement Section's procedures manual as revised to pursuant to (1) above. Initiate or continue enforcement actions on the following priority matters:	(1 a-b): On-going or as required (i.e. QNCR/ Watch List		
		(a) Take timely and appropriate enforcement actions on all dischargers on QNCR and/or Watch List.			
		(b) Continue to pursue formal enforcement actions against the following entities: [REDACTED] [REDACTED]			
		(c) Develop and implement, in consultation with EPA, an initiative to identify and take formal enforcement action against unpermitted industrial storm water dischargers (non-filers).	(1c): By September 30, 2015		
		(d) Take action against permittees that have not participated in the DMR/QA Program for two years.	(1d): As appropriate, or by September 30, 2015		
		All enforcement actions shall include assessment of an appropriate penalty, if any.			
		(2) Refer to EPA for appropriate action cases where: (a) upon issuance of a State Notice and Finding of Violation and Order, the violator files for a hearing on the matter and its return to compliance will be significantly delayed pending such a hearing and (b) DOH resource limitations preclude a timely and/or appropriate enforcement response.	(2): On-going or as required		
		(3) Incorporate pollution prevention projects into enforcement settlements where feasible.	(3): On-going or as required		

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		(4) Collaborate with EPA on review of deliverables and reports from all enforcement cases as required by the respective consent decrees and discuss adequacy with EPA.	(4): On-going or as required		
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Enforcement	(3) Reporting on compliance status and enforcement activities	(5) Report quarterly the total number of State equivalent actions to EPA Administrative Orders issued and the number issued to POTWs for not implementing pretreatment.	(5): Within 45 days of the end of each quarter		
		(6) Report quarterly the number of major facilities addressed by formal enforcement actions against municipalities that are not complying with their schedules.	(6): Within 45 days of the end of each quarter		
		(7) Report quarterly the active State civil case docket, the number of civil referrals sent to the Attorney General, the amount of civil cases concluded, penalties assessed and collected, and the number of criminal referrals.	(7): Within 45 days of the end of each quarter		
		(8) Report quarterly the number of pretreatment State civil referrals sent to the Attorney General, the number of criminal actions filed in State courts, the number of State cases filed, and the number of administrative penalty orders.	(8): Within 45 days of the end of each quarter		
		(9) Report to EPA on a quarterly basis the status of all cases/activities described in item (2) above.	(9): Within 45 days of the end of each quarter		
		(10) Identify at mid-year and end-of-year, the number of POTWs that meet the criteria for Reportable Non-Compliance (RNC) and identify which of those POTWs have had action taken against them, which resolved the violation. Report each action taken: technical assistance, permit/program modification, or formal enforcement. Report the compliance status (RNC, resolved, pending, resolved) of each POTW as of the end of the year.	(10): May 16, and Sept. 30		

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		(11) Enter into ICIS-NPDES applicable WENDB data for each formal enforcement action (equivalent to EPA Administrative Orders and/or Administrative Penalty Orders) taken against major and minor NPDES facilities, NGPC enrollees, and non-filers.	(11): within 30 days of issuance of enforcement action.		
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E. Training and Technical Assistance - Funded under CWA 106					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Training and Technical Assistance	To assure appropriate training is available for CWB staff.	Attend the following meetings/workshops:			
		National Storm Water Coordinators Meeting (EPA)	'15, '16	CWB	FY15 State: Federal: \$66,790
		Annual Meeting of the Association of Clean Water Administrator's (ACWA)	'15, '16	CWB	
		Hawaii Water Environment Association Annual Meeting (HWEA)	'15, '16	CWB	
		Water Environment Federation's Annual Conference and Exposition (WEF)	'15, '16	CWB	
		State/EPA Grant Negotiations for next fiscal year	'15, '16	CWB	
		NPDES Permit Writer's Workshop	'15, '16	CWB	
		ICIS-NPDES Meeting/Training	'15, '16	CWB	
		Exchange Network National Meeting	'15, '16	CWB	
		Hawaii Conservation Conference	'15, '16	CWB	
		National NPS Program Meeting/Monitoring Workshop	'15, '16	CWB	
		National Water Quality Monitoring Conference	'15, '16	CWB	
		National Hydrography Dataset Conference	'15, '16	CWB	
		National TMDL Conference	'15, '16	CWB	
		New England Association of Environmental Biologist Conference	'15, '16	CWB	
		Great Lakes Beach Association Conference	'15, '16	CWB	
		Water Quality Standards Academy	'15, '16	CWB	
		EPA National River and Stream Training	'15, '16	CWB	
		Other appropriate workshops, meetings, trainings, or conferences as recommended by EPA	'15, '16	CWB	

F. Public Participation - Funded under CWA 106					
Program Element	Program Objective/Outcome	Task/Output	Schedule	Responsible Section, Unit, or Staff	Resources Funding Source/Amount Person Months
Public Participation	To meet public participation requirements and regulations and ensure public input on programs.	Conduct public hearings on rule changes.	Ongoing	CWB	State- 3.0
		Conduct public information meetings about proposed water quality assessment and TMDL decisions	Ongoing	CWB	Federal- 3.0
		Creation of a work/advisory group to discuss proposed rule changes, water quality monitoring, assessment methodologies, TMDL development and implementation, and Standards Revision	Quarterly	CWB	FY15 Federal \$9,554

ATTACHMENT 1 - Clean Water Branch (CWB) Monitoring Overview

Monitoring Overview

The goal of the monitoring program is to ensure that Hawaii's coastal waters are safe and healthy for people, plants, and animals, and to protect and restore the quality of Hawaii's streams, wetlands, estuaries, and other inland waters for fish and wildlife, recreation, aesthetic enjoyment, and other appropriate uses.

To pursue these goals, the CWB Monitoring & Analysis Section has heavily committed itself to Beach Monitoring in support of the BEACH Act of 2000, collaboration with Division of Aquatic Resources (DAR) staff in basic Water Quality Monitoring, work with the University of Hawaii, School of Earth Sciences and Technology in the EPA National Coastal Condition Assessment Program and Hawaii Ocean Observing System, and work with USGS in the development of Multi-tracer approach to Wastewater and Nutrient source tracking and its application at Kealekehe, Hawaii, and Kihei and Lahaina, Maui.

CWB continues to collaborate with Division of Aquatic Resources (DAR), Department of Land and Natural Resources on issues of water quality and protecting Hawaii's aquatic resources. CWB and DAR will participate in the EPA National Lakes Assessment Workshop and conduct the Hawaii portion of the national assessment. In FY13 and FY14, DOH will participate in the EPA National River and Stream Assessment with assistance from DAR.

The University of Hawaii, School of Earth Sciences and Technology (SOEST) invited CWB to collaborate in the Hawaii Ocean Observing System (HiOOS). HiOOS is a component of the Pacific Islands Ocean Observing System (PacIOOS), which is one of 11 regional observing systems in the U.S. Integrated Ocean Observing System (IOOS). PacIOOS is being coordinated by the University of Hawaii, SOEST in partnership with the East West Center, and the University of Hawaii, Sea Grant Program with funding from NOAA. The goal of HiOOS is to seek accurate, timely and reliable information about the coastal and open ocean waters of the Hawaiian Islands.

CWB is collaborating with Dr. Tao Yan, UH College of Environmental Engineering on a WERF supported project *Concentration Dynamics of Fecal Indicators in Hawaiian Coastal and Inland Sand, Soil, and Water During Rainfall Events*. CWB supported Dr. Yan's project with \$150,000 from the Kualoa settlement.

CWB is also collaborating with Dr. Alexandria Boehm, Stanford University, College of Civil and Environmental Engineering. Dr. Boehm has provided training for Hawaii's labs in the processing of qPCR samples. Samples will be collected at Lahaina, Hanalei,

and Nawiliwili, processed in Hawaii, and shipped to Dr. Boehm for final analysis. This study will help to determine the source of high bacteria levels and assist the CWB in making assessment decisions.

CWB has agreed to collaborate with Dr Yuanan Lu, UH, Department of Public Health Sciences in his proposal to National Institute of Health, *Human Enteric Viruses-Effective Recovery and Detection from Environmental Waters and their Potential Use as a New Indicator for Monitoring Hawaii Water Quality*.

CWB has worked for several years on the development of multi-tracer approach to wastewater and nutrient source tacking with USGS. Elevated bacteria counts during beach monitoring at Kualoa Beach Park revealed non-operating septic systems at the restrooms of the park. A proof-of-concept approach was developed by USGS at Kualoa and the approach was used and refined at Kealakehe, Kona to determine if the effluent from Kealakehe WWTP is impacting Honokohau Harbor. The multi tracer approach was then used at Kihei and Lahaina, Maui to detect wastewater plumes from municipal injection wells in nearshore marine waters. The Kihei/Lahaina report was published by USGS in December 2009. CWB is fine tuning the approach with pharmaceutical and qPCR testing at the Lahaina seeps and high bacteria locations at Hanalei, Nawiliwili, and other beach locations on Kauai.

CWB continues to collaborate with major recreational water stakeholders of Hawaii including: ILH and OIA High School coaches, trainers, and athletic directors, Canoe organizations (OHCRA, Hui Waa, and Na Opio), Surfrider Foundation Chapters (Oahu, Kauai, and Maui), Hawaii Visitor and Convention Bureau, Waikiki Improvement Association, and various environmental groups.

FIELD INSTRUMENT TESTS: Water samples will be collected by the CWB at each selected site during wet and dry seasons. The HydroLab® multi-parameter probe will be used; the instrument is capable of measuring temperature, pH, conductivity, and dissolved oxygen. For Beach monitoring: Hach® turbidity meter Model 2100P and HydroLab Quanta multi-parameter meter capable of reading dissolved oxygen, conductivity, salinity, pH and temperature.

DOH LABORATORY ANALYSIS: Water chemistry analyses are conducted at the DOH laboratory for physiochemical parameters listed in the State Water Quality Standards as well as silicate and ammonia nitrogen. Other analyses of interest (metals, toxics, bacteria) may be arranged on a case-by-case basis. Bacteria analyses to support the BEACH monitoring program are also conducted.

Water Quality Parameters

Field Analyses - Among the field analyses are the following:

- temperature
- pH
- dissolved oxygen
- oxygen saturation
- oxidation-reduction potential
- salinity
- turbidity
- conductivity
- light intensity PAR

Laboratory Analyses - Analyses conducted by the DOH laboratory includes the following:

- nitrate-nitrite nitrogen
- ammonia nitrogen
- total nitrogen
- total phosphorus
- silicate
- total suspended solids
- bacteria (enterococcus and clostridium perfringens)
- chlor A
- qPCR filtering
-

STORET Data Management

The CWB will input all sampling data into STORET via WQX on a monthly basis. The STORET repository will be the main source of data available to the public, and will also be the main source of marine data for the 305(b) and 303(d) reports. CWB maintains its own website which also has the capability for downloads of sampling data for the public.

ATTACHMENT 2 – NPDES Permit Issuance Schedules

PERMIT ISSUANCE SCHEDULE - FY 2015

First Quarter (October 2014 - December 2014)

- | | |
|---|------------|
| 1. Ala Wai Harbor, Waianae Harbor, Keehi Harbor/Lagoon, Sand Island
Launch Ramp Facility, Heeia Kea Harbor, Haleiwa Harbor Small MS4 (new) | HI S000009 |
|---|------------|

Second Quarter (January 2015 - March 2015)

- | | |
|---------------------------------|------------|
| 2. Maalaea Generating Station## | HI S000004 |
| 3. Kahala Hotel & Resort## | HI 0021300 |

Third Quarter (April 2015 - June 2015)

- | | |
|--|------------|
| 4. Honolulu Seawater Air Conditioning, LLC (new) | HI 0021842 |
| 5. Honolulu Marine, LLC## | HI 0021835 |

Fourth Quarter (July 2015 - September 2015)

- | | |
|---|------------|
| 6. Agribusiness Development Corporation## | HI 0000086 |
| 7. Sunrise Capital, Inc.## | HI 0021654 |
| 8. Marisco, Ltd.## | HI 0021786 |
| 9. Lanai Oil Company, Inc.## | HI 0020958 |

*MAJOR FACILITIES

##CONTRACTOR SUPPORT

PERMIT ISSUANCE SCHEDULE - FY-2016

First Quarter (October 2015- December 2015)

- | | |
|--|------------|
| 1. Keahole Point Fish LLC | HI 0021825 |
| 2. Department of Agriculture Small MS4 | HI S000088 |

Second Quarter (January 2016 - March 2016)

- | | |
|---|------------|
| 3. Ameron Hawaii Kapaa Quarry | HI 0020796 |
| 4. Kulaimano Wastewater Treatment Plant | HI 0020770 |

Third Quarter (April 2016 - June 2016)

- | | |
|---|------------|
| 5. Grove Farm Water Treatment Facility | HI 0021824 |
| 6. Waianae Wastewater Treatment Plant* | HI 0020109 |
| 7. Mahaulepu Quarry | HI 0021491 |
| 8. Ewa Shaft GAC Treatment Facility (new) | HI 0021830 |

Fourth Quarter (July 2016 - September 2016)

- | | |
|---------------------------------------|------------|
| 9. NAVFAC Wastewater Treatment Plant* | HI 0110086 |
| 10. Shipman Generating Station* | HI 0000264 |
| 11. Topa Financial Center | HI 0021768 |

*MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY-2017

First Quarter (October 2016 - December 2016)

1. Haleiwa Wells GAC Water Treatment Facility	HI 0021839
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Second Quarter (January 2017 - March 2017)

2. Hawaii Oceanic Technology Inc – Ahi Aquaculture Project (new)	HI 0021840
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Third Quarter (April 2017 - June 2017)

3. Honolulu Generating Station*	HI 0000027
---------------------------------	------------

Fourth Quarter (July 2017 - September 2017)

4. Kahe Generating Station*	HI 0000019
5. Waiau Generating Station*	HI 0000604
6. Port Allen Generating Station*	HI 0000353
7. Pacific Shipyards International, LLC	HI 0020753

* MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY-2018

First Quarter (October 2017 - December 2017)

- | | |
|-----------------------------|------------|
| 1. Yacht Harbor Towers AOAO | HI 0020346 |
| 2. Honouliuli WWTP* | HI 0020877 |
| 3. Sand Island WWTP* | HI 0020117 |

Second Quarter (January 2018 - March 2018)

- | | |
|--|------------|
| 4. Kailua Regional Wastewater Treatment Plant* | HI 0021296 |
| 5. Pearl Harbor Naval Shipyard & IMF Drydocks 1-4* | HI 0110230 |

Third Quarter (April 2018 - June 2018)

- | | |
|---|------------|
| 6. Hilo WWTP* | HI 0021377 |
| 7. Ameron Hawaii Sand Island Facility | HI 0021075 |
| 8. Hawaiian Cement – Halawa Quarry | HI 0000558 |
| 9. Agribusiness Development Corporation | HI 0000086 |

Fourth Quarter (July 2018 - September 2018)

- | | |
|--|------------|
| 10. Wailua Wastewater Treatment Plant* | HI 0020257 |
| 11. Marine Corps Base Hawaii Kaneohe Bay Water Reclamation Facility* | HI 0110078 |
| 12. DOT-HWYS MS4* | HI S000001 |
| 13. Halfway Bridge Rock Quarry and Crusher | HI 0020842 |

*MAJOR FACILITIES

PERMIT ISSUANCE SCHEDULE - FY 2019

First Quarter (October 2018 - December 2018)

- | | |
|----------------------------------|------------|
| 1. US Army Garrison Hawaii (MS4) | HI S000090 |
| 2. Maui Ocean Center | HI 0021504 |

Second Quarter (January 2019 - March 2019)

- | | |
|---|------------|
| 3. Honolulu International Airport Small MS4 | HI S000005 |
| 4. Hawaii Army National Guard Maintenance Shops and Small MS4 on Oahu | HI S000052 |

Third Quarter (April 2019 - June 2019)

- | | |
|--|------------|
| 5. Marine Corps Base Hawaii-MS4 | HI S000007 |
| 6. Navy MS4 (Combined HI S000006 and HI S000069) | HI S000257 |
| 7. Papaikou-Paukaa WWTP | HI 0021113 |

Fourth Quarter (July 2019 - September 2019)

- | | |
|---|------------|
| 8. Napili Well "A" GAC | HI 0021661 |
| 9. Keahole Point Fish, LLC | HI 0021825 |
| 10. Kahului Generating Station* | HI 0000094 |
| 11. East Honolulu WWTP* | HI 0020303 |
| 12. Naval Information Operations CMD Hawaii | HI 1121156 |
| 13. City and County of Honolulu MS4* | HI S000002 |
| 14. Oahu Schools Small MS4 | HI S000003 |

* MAJOR FACILITIES

ATTACHMENT 3 - Watershed Assessments/TMDL Program Plan

1. Program Objectives/Outcomes

The EPO stored their TMDL associated equipment at Building 4, Waimano Ridge near the DOH Laboratory. In March 2012, all equipment was moved to the CWB baseyard at Waimano Ridge. There were a lot of ISCO samplers that were sitting idle and some had Bob Bourke, Oceanit labels on them (used them previously). Rather than have these equipment sitting idle, we decided to loan Oceanit the samplers for upcoming work for the City and County of Honolulu. Their plan is to use the equipment to supplement their own for watershed water quality runoff studies. By having a large number of samplers they will be able to canvas all critical areas within a watershed to better identify the specific sources of pollutants. We ask that data obtained be shared with CWB and it was agreed. The samplers were originally bought by Oceanit with contract funds from EPO for work on another completed project. At the end of the contract, equipment was turned over to EPO.

Due to Reduction in Force in the CWB Monitoring Section, TMDL Program will always look for opportunities to share resources to produce monitoring data for mutual use. The collaboration with Oceanit is the first occasion where DOH idle equipment is being used to generate data for TMDL development. More such collaborations will be pursued in the future.